(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 15 January 2004 (15.01.2004)

PCT

A61B 17/70

(10) International Publication Number WO 2004/004549 A3

(51) International Patent Classification7:

(21) International Application Number: PCT/US2003/021572

(22) International Filing Date: 10 July 2003 (10.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/394,779 10 July 2002 (10.07.2002) US

(71) Applicant and

(72) Inventor: AFERZON, Joseph [US/US]; Suite 101, 111 West Main Street, New Britain, CT 06051 (US).

(74) Agent: SOFER, Joseph; Sofer & Haroun L.L.P., 317 Madison Avenue, Suite 910, New York, NY 10017 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

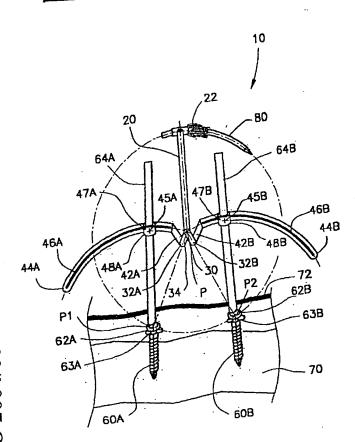
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: SPINAL SUPPORT COUPLING DEVICE



(57) Abstract: The present invention is directed to a spinal support coupling device (10) comprised of first and second radial frames (44A and 44B), each pivotably coupled to a center pivot hinge (30). A traveling arm (20) is provided, coupled to the first and second radial frames (44A and 44B) at the center pivot hinge (30). The traveling arm (20) is configured to rotate with respect to the first and second radial frames (44A and 44B) around the center pivot hinge (30). A coupling rod (80) is attached to the traveling arm (20) and configured to connect a first and a second surgical screw (60A and 60B), placed into a patient. The first and second radial frames (44A and 4413) are configured to retain corresponding first and second extension rods (64A and 64B), extending away from the top of the first and second surgical screws (60A and 60B).